

**General Specification for Building Services Installation
in Government Buildings of the Hong Kong Special Administrative Region
2022 Edition (Incorporating Corrigendum No.GSBS03-2022)**

The General Specification for Building Services Installation in Government Buildings of the Hong Kong Special Administrative Region 2022 Edition (hereinafter referred to as “General Specification for Building Services Installation 2022 Edition”) is reviewed from time to time to ensure that requirements stipulated in the document are clear, concise and in pace with technological advancements.

Corrigendum No.GSBS03-2022 is issued to incorporate updates and revisions to the General Specification for Building Services Installation 2022 Edition (Incorporating Corrigendum No.GSBS02-2022) which are highlighted in the ensuing summary of major changes.

Electronic version of the General Specification for Building Services Installation 2022 Edition (Incorporating Corrigendum No.GSBS03-2022) can be viewed on the ArchSD Internet website.

After an introductory period of about 1 month, the General Specification for Building Services Installation 2022 Edition (Incorporating Corrigendum No.GSBS03-2022) shall apply to all tenders to be invited on or after 1 December 2024.

(10/2024)

**MAJOR CHANGES IN THE CORRIGENDUM (NO.GSBS03-2022) OF THE
GENERAL SPECIFICATION FOR BUILDING SERVICES INSTALLATION
IN GOVERNMENT BUILDINGS OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION
2022 EDITION**

Old Ref. No.	New Ref. No.	Major Changes
SUB-SECTION 1.1.1 - SCOPE AND GENERAL REQUIREMENTS		
1.1.1.3	1.1.1.3	Add terms and definitions of “Accredited Laboratory”.
SUB-SECTION 1.1.2 - STATUTORY OBLIGATIONS AND OTHER REGULATIONS		
1.1.2.1.7	1.1.2.1.6	<ul style="list-style-type: none"> - Replace "EN 81-40:2008" with "EN 81-40:2020". - Replace clause “1.1.2.1.6” with “1.1.2.1.5”. - Replace clause “1.1.2.1.7” with “1.1.2.1.6”.
SUB-SECTION 1.1.3 - EXECUTION OF INSTALLATIONS		
1.1.3.16	1.1.3.16	In the 2 nd para, add "or similar size of steel bar or frame".
SUB-SECTION 1.2.1 - GENERAL REQUIREMENTS		
1.2.1.7	1.2.1.7	Delete sub-para (a) to (g) under “Type-test” Certificate.

Old Ref. No.	New Ref. No.	Major Changes
SUB-SECTION 2.1.1 – GENERAL REQUIREMENTS		
2.1.1.4	2.1.1.4	<ul style="list-style-type: none"> - In sub-para (c), update the title of the Guidance Note to “Guidance Note on Fixed Electrical Installations with Modular Integrated Construction (MiC) Method/ Multi-trade Integrated Mechanical, Electrical and Plumbing (MiMEP) Method”. - In sub-para (f), update the title of the Guidance Note to “Guidance Note on Supply of Prescribed Products with Energy Label at MiC Projects”. - Add sub-para (k), “Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers, PNAP ADV-36 Modular Integrated Construction, issued by the Buildings Department (BD)”. - Add sub-para (l), “Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers, PNAP APP-151 Building Design to Foster a Quality and Sustainable Built Environment, issued by the Buildings Department (BD)”.
SUB-SECTION 2.1.3 – QUALITY CONTROL AND SUPERVISION		
2.1.3.1	2.1.3.1	<ul style="list-style-type: none"> - In the 4th para, add “of the modules”. - In the 5th para, add “/assembly”.
SECTION 2.2.2 – MULTITRADE INTEGRATED MECHANICAL, ELECTRICAL AND PLUMBING MODULES		
2.2.2.2	2.2.2.2	In the 5 th para, add “and/or framework”.
SUB-SECTION 3.1.1 – PHOTOVOLTAIC SYSTEM		
3.1.1.3	3.1.1.3	In the 1st para, amend as “Relevant type test certificates for the offered PV and/or BIPV panels shall be submitted. Type test certificates shall be provided by an Accredited Laboratory. The decay rates of polycrystalline silicon cell modules and monocrystalline silicon cell modules shall not be higher than 2.5% and 3% in the first year, and not higher than 0.7% per year, and not higher than 20% within the period of 25 years; the attenuation rate of thin-film battery module shall not be more than 5% in the first year, no more than 0.4% per year in the following year, no more than 15% within the period of 25 years.”.

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3.1.1.9	3.1.1.9	<ul style="list-style-type: none"> - Add the 5th para, “The minimum photoelectric conversion efficiency of silicon polycrystalline cells and silicon monocrystalline cells shall not be less than 19% and 21% respectively.” - In the 6th para, amend as “Silicon monocrystalline, silicon polycrystalline, copper indium gallium selenide (CIGS), cadmium telluride (CdTe) and other thin-film cell modules with the respective minimum module efficiency of 20%, 15%, 12%, 14% and 12%.”.
SUB-SECTION 4.2.2 – IoT Gateway		
4.2.2.7	4.2.2.7	<ul style="list-style-type: none"> - Add a new para, “When gateway is installed indoor, cabinet with mechanical lock shall be located to accessible location for maintenance.” - In the 2nd para, add “For outdoor installation,”. - In the 2nd para, delete “The material of the cabinets shall be of stainless steel or other materials as approved by the Supervising Officer”. - Add a new para, “The waterproof cabinet shall have a degree of protection not less than IP 65 as specified in shall be located to accessible location for maintenance”. - Delete the last para, “The metal enclosure shall be located to for the metal enclosure.”
SECTION 6.1.2 – DUCTWORK		
6.1.2.1	6.1.2.1	In the 3 rd para, delete “leakage test of the ductwork shall be carried out before the application of insulation.”.
SECTION 6.1.5 – CENTRAL CONTROL AND MONITORING SYSTEM (CCMS)		
6.1.5.1.8	6.1.5.1.8	Delete “Warranty” and combine sub-para (a) and (b)..
SECTION 6.1.6 – CENTRAL REFRIGERATION MACHINE, DIRECT EXPANSION EVAPORATOR AND HEAT REJECTION PLANT		
6.1.6.4.5	6.1.6.4.5	<ul style="list-style-type: none"> - Delete sub-para (e). - Replace sub-para (f) to (e).

Old Ref. No.	New Ref. No.	Major Changes
SECTION 6.1.7 – ELECTRIC MOTORS AND ELECTRICAL EQUIPMENT		
6.1.7.1	6.1.7.1	Add a new para, “Motors shall meet the requirements of IEC 60072-1:1991, IEC 60072-2:1990 and IEC 60072-3:1994 whichever is appropriate.”.
SECTION 6.1.11 – THERMAL INSULATION		
6.1.11.2.6	6.1.11.2.6	<ul style="list-style-type: none"> - In the 1st para, add “and joints”. - In the 2nd para, replace “All joints between pipes shall be insulated using foam-in-situ ...the foam is well bonded to the pipe’s surface and the cladding/outer jacket.” with “All joints between pipes shall be insulated using the same foaming chemical to ensure the foam is well bonded to the pipe’s surface and the cladding/outer jacket.”. - In the 4th para, delete “of pipe joints”.
SECTION 6.2.2 – DUCTWORK AND ACCESSORIES		
6.2.2.1	6.2.2.1	In the 1 st para, replace “organisation accredited under HOKLAS of HKAS, or an organisation accredited by an accreditation body mutually recognised by HKAS, shall be submitted” with “Accredited Laboratory”.
6.2.2.11.1	6.2.2.11.1	<ul style="list-style-type: none"> - In the 3rd para, replace “organisations accredited by the Hong Kong Laboratory Accreditation Scheme (HOKLAS) or ... accepted by the FSD” with “an Accredited Laboratory. All Fire or Smoke dampers ...Buildings Ordinance of HKSAR”. - In the 4th para, delete “be constructed to the approved organisations accredited by the Hong Kong Laboratory Accreditation Scheme (HOKLAS) or by the Hong Kong Accreditation Service (HKAS), or organisations accredited by an accreditation scheme mutually recognised by HOKLAS or HKAS and”. - In the 5th para, delete “shall comply with the requirements of the Circular Letters issued by the FSD and the Buildings Ordinance of HKSAR. These blades”.
SECTION 6.2.3 – AIR HANDLING AND TREATMENT EQUIPMENT		
6.2.3.7.1	6.2.3.7.1	Replace “GB/T 19232:2003” with “GB/T 19232:2019”.

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SECTION 6.2.9 – PIPE MATERIAL, VALVES, COCKS AND STRAINERS		
6.2.9.10	6.2.9.10	In the 2 nd para, replace “malleable iron hand wheel” with “malleable iron, ductile iron or cast iron hand wheel”.
SECTION 6.2.11 –THERMAL INSULATION		
6.2.11.1.2	6.2.11.1.2	Replace “laboratories by independent regulatory/ testing bodies, independent accredited laboratories or elsewhere as approved.” with “an Accredited Laboratory shall be submitted”.
6.2.11.2.1	6.2.11.2.1	<ul style="list-style-type: none"> - In the 1st para of sub-para (h), replace “the organisations accredited by the Hong Kong Laboratory Accreditation Scheme (HOKLAS) or by the Hong Kong Accreditation Service (HKAS), or organisations accredited by an accreditation scheme mutually recognised by HOKLAS or HKAS” with “an Accredited Laboratory shall be submitted”. - In the 2nd para of sub-para (h), replace “ASTM C1371-15” with “ASTM C1371-15: 2022” and “ASTM E408-13” with “ASTM E408-13:2019”.
6.2.11.2.9	6.2.11.2.9	<ul style="list-style-type: none"> - In sub-para (c), replace “Compressive strength: 245kN/m² (BS EN ISO 844: 2014) minimum;” with “Compressive strength : 245kN/m²(BS EN ISO 844: 2021 or ASTM D1621:2016) minimum;”. - In sub-para (e), replace “(BS EN ISO 4590:2003 and BS ISO 1922:2012 or BS EN ISO 4590:2003)” with “(BS EN ISO 4590:2016 and BS ISO 1922:2018 or BS EN ISO 4590:2016)”.
6.2.11.3	6.2.11.3	In the 1 st para, replace “organisations accredited by the Hong Kong Laboratory Accreditation Scheme (HOKLAS) or by the Hong Kong Accreditation Service (HKAS), or organisations accredited by an accreditation scheme mutually recognised by HOKLAS or HKAS, shall be provided” with “an Accredited Laboratory shall be submitted”.
SECTION 6.2.15 – WATER TREATMENT SYSTEM		
6.2.15.3	6.2.15.3	In the 2 nd para of sub-para (b), delete “type-test or”.

Old Ref. No.	New Ref. No.	Major Changes
SUB-SECTION 7.1.1 – GENERAL		
7.1.1.3	7.1.1.3	In the 1 st para, add “All power cables in a fixed wiring installation shall be identifiable at its terminations in accordance with the Code of Practice for the Electricity (Wiring) Regulations.”.
7.1.1.3.1	7.1.1.3.1	Replace “Cable markers for identification purposes shall comply with BS 3858:1992.” with “Cable binding and identification sleeve shall comply with BS 3858:1992 or a non-ferrous metallic label shall be fixed to the cable giving the size and identification of the cable, e.g. 50 mm ² 4-core XLPE/SWA/PVCS copper cable to "Services Block".”.
7.1.1.3.3	7.1.1.3.3	<ul style="list-style-type: none"> - Replace “.... carrier strips shall be made from Halogen-free materials and flame resistance,...” with “....carrier strips shall be made from halogen-free materials”. - Replace “They shall be of high mechanical strength, rigidity and hardness characteristics. The material shall also be chemical resistance against sodium hydroxide, seawater, detergent, petrol, diesel, sodium chloride solution, nitric acid, ammonium hydroxide, etc.” with “They shall be of high chemical resistance, high mechanical strength, rigidity and hardness characteristics.”.
SUB-SECTION 7.1.3 – POWER CABLES, CABLE TRAYS AND CABLE LADDERS		
7.1.3.7.3	-	Delete the original clause.
SUB-SECTION 7.1.4 – GENERAL LIGHTING AND POWER		
7.1.4.1.1	7.1.4.1.1	Add a new clause “Safety chains shall be provided to hold the luminaire from falling.”.
7.1.4.1.5	7.1.4.1.5	In the 3 rd para, delete “type test”.
SUB-SECTION 7.1.8 – MISCELLANEOUS INSTALLATIONS		
7.1.8.4.4	7.1.8.4.4	In the 1 st para, add “BS EN ISO 1460:1995”.

Old Ref. No.	New Ref. No.	Major Changes
SUB-SECTION 7.2.2 – WIRING SYSTEM: CABLES, CONDUITS, TRUNKING AND ACCESSORIES		
7.2.2.1.3	7.2.2.1.3	In sub-para (o), delete “up to and including conductor size of 120 mm ² ”.
7.2.2.1.3	7.2.2.1.3	In sub-para (q), replace “with 1/C non-armoured cables up to and including conductor size of 1,000 mm ² ; 2/C to 5/C non-armoured cables up to and including conductor size of 120 mm ² ” with “having low emission of smoke and corrosive gases when affected by fire”.
7.2.2.1.3	7.2.2.1.3	In sub-para (r), replace “...armoured cables, fire-resistant cables...” with “...armoured, fire-resistant cables...”.
7.2.2.1.4	7.2.2.1.4	In sub-para (g), add “with thermoplastic PVC insulation”.
7.2.2.1.6	7.2.2.1.6	In the 1 st para, replace “be type tested to” with “comply with”.
7.2.2.1.7	7.2.2.1.7	<ul style="list-style-type: none"> - In the 1st para, add “comply with the following requirements:” - In sub-para (e), delete “Type test certificate ... shall be submitted:”
7.2.2.4.1	7.2.2.4.1	<ul style="list-style-type: none"> - Add a new clause “Steel trunking systems shall comply with IEC 61084-1:2017, BS EN 50085-1:2005+A1:2013 or equivalent.” - In the 3rd para, add “BS EN 50085-2-1:2006+A1:2011 or equivalent.”. - In the 4th para, replace “Steel flush floor and underfloor trunking shall be compatible to the requirements laid down in IEC 61084-1:2017 and IEC 61084-2-2:2017.” with “Steel flush floor, on floor and underfloor trunking shall be compatible to the requirements laid down in IEC 61084-2-2:2017, BS EN 50085-2-2:2008 or equivalent.”
7.2.2.4.2	7.2.2.4.2	Replace “organisation accredited under HOKLAS of the HKAS, or an organization accredited by an accreditation body mutually recognised by HKAS, shall be submitted” with “Accredited Laboratory”.

Old Ref. No.	New Ref. No.	Major Changes
SUB-SECTION 7.2.3 – POWER CABLES AND ASSOCIATED CABLING FACILITIES		
7.2.3.2	7.2.3.2	<ul style="list-style-type: none"> - In sub-para (d), replace “IEC 60702 1:2002/AMD1:2015 and IEC 60702 2:2002/AMD1:2015” with “IEC 60702-1: 2002+A1:2015 and IEC 60702-2:2002+A1:2015”. - In sub-para (e), replace “IEC 60702 1:2002/AMD1:2015 and IEC 60702 2:2002/AMD1:2015” with “IEC 60702-1: 2002+A1:2015 and IEC 60702-2:2002+A1:2015”. - Delete sub-para (i).
7.2.3.7	7.2.3.7	<ul style="list-style-type: none"> - Amend the title of clause as “IDENTIFICATION OF CABLE CORES”. - In the 1st para, replace “Each core of a PVC or XLPE power cable shall be identified continuously throughout its entire length.” with “All power cables in a fixed wiring installation shall be identifiable at its terminations in accordance with the Code of Practice for the Electricity (Wiring) Regulations and shall be identified continuously throughout its entire length by appropriate labels, colours or coding.”.
7.2.3.10.1	7.2.3.10.1	Replace “Perforated metal cable trays shall be formed from plain steel sheet complying with BS EN 10149-1:2013, and shall be hot-dipped galvanised to ISO 1460:1992 and ISO 1461:2009 after perforation.” with “Cable tray systems shall comply shall comply with BS EN 61537:2007 / IEC 61537:2006. Perforated metal cable trays shall be formed from plain steel sheet complying with BS EN 10149-1:2013, and shall be hot-dipped galvanised to BS EN ISO 1460:1995 and BS EN ISO 1461:2009 after perforation.”.
7.2.3.11.1	7.2.3.11.1	Replace “IEC 61537:2006” with “BS EN 61537:2007 or IEC 61537:2006”.
7.2.3.11.2	7.2.3.11.2	Replace “ISO 1461:2009” with “BS EN ISO 1460:1995 and BS EN ISO 1461:2009”.
7.2.3.12.1	7.2.3.12.1	Replace “Generally, unless otherwise specified, all cable ladder fittings and accessories mentioned below shall be manufactured from hot rolled steel to BS EN 10149-1:2013 and then hot dipped galvanised to ISO 1460:1992 and ISO 1461:2009 after fabrication. ” with “Cable ladder systems shall comply shall comply with BS EN 61537:2007 / IEC 61537:2006. Unless otherwise specified, all cable ladder fittings and accessories mentioned below shall be manufactured from hot rolled steel to BS EN 10149-1:2013 and shall be hot dipped galvanised to BS EN ISO 1460:1995 and BS EN ISO 1461:2009 after fabrication.”

Old Ref. No.	New Ref. No.	Major Changes
SUB-SECTION 7.2.4 – WIRING ACCESSORIES AND MEASURING INSTRUMENTS		
7.2.4.3.1	7.2.4.3.1	In the 4 th para, replace “IEC 60309-2:2012” with “IEC 60309-2: 1999+AMD1:2005+AMD2:2012 CSV”.
SUB-SECTION 7.2.5 – SWITCHGEAR AND ASSOCIATED EQUIPMENT		
7.2.5.4.1	7.2.5.4.1	In the 3 rd para, delete “and be type tested to”.
7.2.5.5.1	7.2.5.5.1	In the 1 st para, delete “and be type tested to”.
7.2.5.6.1	7.2.5.6.1	In the 1 st para, delete “and be type tested to”.
7.2.5.7.1	7.2.5.7.1	In the 1 st para, replace “type tested to” with “and comply with”.
7.2.5.7.4	7.2.5.7.4	Replace “type tested to” with “complying with”.
7.2.5.8.2	7.2.5.8.2	Replace “Fuse shall comply with, and be type tested to IEC 60269-1:2006/AMD2:2014 - Low-voltage fuses.” to “Fuse shall comply with IEC 60269-1:2006/AMD2:2014.”.
7.2.5.12.1	7.2.5.12.1	Delete “and be type tested to”.
7.2.5.13	7.2.5.13	Replace “The voltage dip ride-through device shall comply with the ride-through duration and voltage dip magnitude as specified in the Particular Specification and in accordance with the testing method stipulated in IEC 61000-4-11:2004+AMD1:2017 CSV and IEC 61000-4-34:2005+AMD1:2009.” with “The voltage dip ride-through device shall comply with the ride-through duration, voltage dip magnitude and testing method as specified in the Particular Specification, Semiconductor Equipment and Materials International (SEMI) F47, IEC 61000-4-11:2004+AMD1:2017 CSV or IEC 61000-4-34:2005+AMD1:2009.”.
7.2.5.13.3	7.2.5.13.3	In sub-para (f), delete “Semiconductor Equipment and Materials International,”.
7.2.5.14.1	7.2.5.14.1	In the 1 st para, delete “and be type tested to”.
7.2.5.17.1	7.2.5.17.1	In sub-para (d), replace “Type test certificate for the surge protection device shall be submitted for approval by the Supervising Officer. The certificate shall, unless otherwise specified, demonstrate that the equipment can fulfill...” with “Surge protection device shall fulfill...”

Old Ref. No.	New Ref. No.	Major Changes
7.2.5.19.2	7.2.5.19.2	In sub-para (b), add a new clause (xiii) “it shall have voltage dip ride-through capability or auto-restart features.”.
7.2.5.20.2	7.2.5.20.2	In sub-para (b), add “unless there is a power quality monitoring system and / or building energy management system which is capable of maintaining all data collected for the same period.”.
7.2.5.21.1	7.2.5.21.1	In sub-para (e), delete “and shall have a proven life expectancy of at least 4 years”.
7.2.5.23.1	7.2.5.23.1	In sub-para (f), replace “be type tested for” with “comply with”.
7.2.5.24.2	7.2.5.24.2	In sub-para (c), add “unless there is a power quality monitoring system and / or building energy management system which is capable of maintaining all data collected for the same period.”.
7.2.5.26.3	7.2.5.26.3	In the 2 nd para, add “The power supply for the control of MC Switchboard shall be protected against voltage dip.”.
SUB-SECTION 7.2.6 – BUSBAR TRUNKING SYSTEM		
7.2.6.1	7.2.6.1	In the 1 st para, replace “organisations accredited by the Hong Kong Laboratory Accreditation Scheme (HOKLAS) or by the Hong Kong Accreditation Service (HKAS), or organisations accredited by an accreditation scheme mutually recognised by HOKLAS or HKAS” with “an Accredited Laboratory”.
7.2.6.10	7.2.6.10	In the 1 st para, replace “....shall be carried out by competent and independent short circuit testing organisations accredited by HOKLAS or HKAS, or organisations accredited by an accreditation scheme mutually recognised by HOKLAS or HKAS and....” with “....shall be carried out by a competent and independent short circuit testing organisation accredited under HOKLAS of the HKAS, or an organisation accredited by an accreditation body recognised by HKAS as MRA Partners for HOKLAS and....”.
SUB-SECTION 7.2.7 – FLUORESCENT LUMINAIRE AND LAMP		
7.2.7.1.2	7.2.7.1.2	<ul style="list-style-type: none"> - Replace “ISO 9000:2008” with “ISO 9001:2015”. - Replace “IEC 62722-1:2016” with “IEC 62722-1:2014”. - Replace “IEC 61347-1:2015+AMD1:2017” with “IEC 61347-1:2015/AMD1:2017”. - Replace “IEC 60927:2007+AMD1:2013” with “IEC 60927:2007/AMD1:2013”.

Old Ref. No.	New Ref. No.	Major Changes
7.2.7.1.5	7.2.7.1.5	<ul style="list-style-type: none"> - In the 1st para, replace “Type test certificate shall be provided and the luminaires shall be marked in accordance with” with “Manufacturer test certificates shall be provided to demonstrate the luminaires comply with”. - In the 2nd para, replace “In exceptional cases like tailor-made luminaires having been specified where type test certificate for the luminaire is not available, compliance of individual components to the respective international standards as stipulated...” with “In exceptional cases like tailor-made luminaires or luminaires equipped with alternative controlgear, compliance of individual components to the respective international standards, endurance tests and thermal tests as stipulated....”.
7.2.7.3.2	7.2.7.3.2	Replace “IEC60598: 2014+AMD1: 2017” with “IEC60529:1989/AMD2:2013/COR1:2019”.
SUB-SECTION 7.2.8 – HIGH INTENSITY DISCHARGE LUMINAIRE AND LAMP		
7.2.7.8.1	7.2.7.8.1	Replace “organisations accredited by HOKLAS or HKAS, or organisations accredited by an accreditation scheme mutually recognised by HOKLAS or HKAS” with “an Accredited Laboratory”.
SUB-SECTION 7.2.9 – LIGHT EMITTING DIODE LUMINAIRE AND DRIVER		
7.2.9.1.2	7.2.9.1.2	Replace “organisations accredited by HOKLAS or HKAS, or organisations accredited by an accreditation scheme mutually recognised by HOKLAS or HKAS” with “an Accredited Laboratory”.
7.2.9.1.3	7.2.9.1.3	Replace “The LED luminaires shall be marked in accordance with the requirements....” with “Manufacturer test certificates shall be provided to demonstrate the LED luminaires comply with the requirements....”
7.2.9.3.1	7.2.9.3.1	Replace “organisations accredited by HOKLAS or HKAS, or organisations accredited by an accreditation scheme mutually recognised by HOKLAS or HKAS” with “an Accredited Laboratory”.
7.2.9.4.2	7.2.9.4.2	Amend as “Certificate of compliance shall be provided for each model of LED module, LED luminaire or self-ballasted LED lamp to demonstrate the compliance with the above performance requirements. The test report shall be issued from an Accredited Laboratory to certify each model of LED module, LED luminaire or self-ballasted LED lamp complying with the standards or other recognised international/national standards agreed by the Supervising Officer.”.

Old Ref. No.	New Ref. No.	Major Changes
SUB-SECTION 7.2.10 – DOMESTIC APPLIANCES		
7.2.10.16.6	7.2.10.16.6	Replace “organisations accredited by HOKLAS or HKAS, or organisations accredited by an accreditation scheme mutually recognised by HOKLAS or HKAS” with “an Accredited Laboratory”.
SUB-SECTION 7.2.11 – LOW VOLTAGE CUBICLE SWITCHBOARD		
7.2.11.3	7.2.11.3	In the 8 th para, replace “Wireless temperature sensors shall be provided at the three phase and neutral of the main busbars / cable terminations of the ACB main incomers on both line and load sides and ACB feeders inside the Switchboard for early detection ...” with “Wireless temperature sensors shall be provided at the three phase and neutral of the busbar at or above 800A, including cross-cubicle busbar connection, power cable terminations and main circuit breaker terminals, inside the Switchboard for early detection ...”.
7.2.11.9	7.2.11.9	<ul style="list-style-type: none"> - In the 1st para, replace “... Clause 7.2.5.20 of this General Specification shall be used for outgoing circuits. Supply healthy indicating lamps shall be provided at every main incoming circuit breaker or switch.” to “... Clause 7.2.5.20 of this General Specification shall be used for outgoing circuits. All meters shall be capable to record all measured electrical parameters with 10 minutes aggregation interval complying with Class A requirements of IEC 61000-4-30:2014+AMD1:2021 CSV. Supply healthy indicating lamps shall be provided at every main incoming circuit breaker or switch.” - Add a new para “Voltage sensing relays shall be suitable for monitoring voltage of 380/220V 3-phase 4-wire system. The relay shall be installed with a true-off delay timer or operated at 24 V D.C. to ensure the continuous operation of the relay when the voltage at either one phase drops. The relay shall be provided with indication to show its operation status. The voltage sensing elements shall operate from measured phase-to-neutral voltages. When the voltage at either one phase drops below the voltage setting and sustains for a period exceeding the time setting, the relay shall activate the dry contacts to open position. The dry contacts shall be reset to close position automatically when all the measured voltages resume normal.”.
7.2.11.15	7.2.11.15	Replace “Verification testing of typical Switchboard to IEC 61439-2:2011....” with “Verification testing / Type-testing of typical Switchboard to IEC 61439-2:2011....”

Old Ref. No.	New Ref. No.	Major Changes
SUB-SECTION 7.2.12 – DIESEL GENERATING SET INSTALLATION		
7.2.12.7.1	7.2.12.7.1	In the 7 th para of sub-para (a), replace “organisations accredited by the Hong Kong Laboratory Accreditation Scheme (HOKLAS) or ... before use.” with “an Accredited Laboratory before use.”
SUB-SECTION 7.2.13 – HIGH VOLTAGE SWITCHGEAR AND EQUIPMENT		
7.2.13.2.9	7.2.13.2.9	In sub-para (b), replace “The cable lug shall be type-tested to IEC 61238-1-3:2018.” with “The cable lug shall comply with IEC 61238-1-3:2018.”
7.2.13.3.1	7.2.13.3.1	<ul style="list-style-type: none"> - In sub-para (b), add “The power supply for the control of the switchboards shall be protected against voltage dip.”. - In sub-para (d), replace “accredited by the Hong Kong Laboratory Accreditation Scheme (HOKLAS) or by the Hong Kong Accreditation Service (HKAS), or organisations accredited by an accreditation scheme mutually recognised by HOKLAS or HKAS.” with “an Accredited Laboratory.”.
7.2.13.4.3	7.2.13.4.3	In sub-para (a), Replace “...if the type-test certificate is issued by accredited laboratories.” with “.... if the relevant test certificate is issued by an Accredited Laboratory.”.
SUB-SECTION 7.2.15 – ELECTRIC VEHICLES CHARGING FACILITIES		
7.2.15.1	7.2.15.1	<ul style="list-style-type: none"> - Replace “IEC 61851-1” with “IEC 61851-1:2017”. - Replace “IEC 61851-21-1” with “IEC 61851-21-1:2017”. - Replace “IEC 61851-21-2” with “IEC 61851-21-2:2018”.

Old Ref. No.	New Ref. No.	Major Changes
7.2.15.4	7.2.15.4	<ul style="list-style-type: none"> - Replace “...accordance with IEC 61851 or equivalent...” with “...accordance with IEC 61851 series or equivalent...”. - Replace “IEC 60309” with “IEC 60309-1:1999+AMD1:2005+AMD2:2012 CSV”. - Add new clause “IEC 60309-2:1999+AMD1:2005+AMD2:2012 CSV : Plugs, socket-outlets and couplers for industrial purposes – Part 2: Dimensional interchangeability requirements for pin and contact-tube accessories”. - Replace “IEC 62196-1” with “IEC 62196-1:2014”. - Replace “IEC 62196-2” with “IEC 62196-2:2016”. - Replace “IEC 62196-3” with “IEC 62196-3:2014”.
SUB-SECTION 7.3.1 – SPECIFIC REQUIREMENTS DURING CONSTRUCTION PERIOD		
7.3.1.6.3	7.3.1.6.3	In sub-para (b), Replace “organisations accredited by the Hong Kong Laboratory Accreditation Scheme(HOKLAS) or by the Hong Kong Accreditation Service (HKAS), or organisations accredited by an accreditation scheme mutually recognised by HOKLAS and HKAS” with “an Accredited Laboratory”.
SUB-SECTION 7.3.2 – SPECIFIC REQUIREMENTS DURING MAINTENANCE PERIOD		
-	7.3.2.7	<p>Add a new clause: “INSPECTION AND TESTING OF LIGHTNING PROTECTION SYSTEM</p> <p>The lightning protection system shall be tested annually for continuity between air terminations and earthing terminations and the resistance shall be recorded. Visual inspection on the condition of lightning protection system shall be also be carried out annually to ensure no evidence of corrosion likely to lead deterioration of the lightning protection system.</p> <p>An Inspection and Test Reports shall be submitted to the Supervising Officer for approval within two weeks before the expiry date of the Maintenance Period.”</p>

Old Ref. No.	New Ref. No.	Major Changes																																																
SUB-SECTION 8.1.1 – PIPEWORK, VALVES AND FITTINGS																																																		
8.1.1.1	8.1.1.1	<p>- Update table 8.1.1.1 as</p> <table border="1" data-bbox="696 323 1536 866"> <thead> <tr> <th data-bbox="696 323 887 437">Nominal Size DN (mm)</th> <th data-bbox="887 323 1099 437">Pipe Class</th> <th data-bbox="1099 323 1312 437">Minimum Pipe Thickness (mm)</th> <th data-bbox="1312 323 1536 437">Minimum Fitting Thickness (mm)</th> </tr> </thead> <tbody> <tr><td>80</td><td>100</td><td>5.6</td><td>4.6</td></tr> <tr><td>100</td><td>100</td><td>5.8</td><td>4.8</td></tr> <tr><td>150</td><td>100</td><td>6.3</td><td>5.3</td></tr> <tr><td>200</td><td>64</td><td>6.9</td><td>5.9</td></tr> <tr><td>250</td><td>64</td><td>7.4</td><td>6.4</td></tr> <tr><td>300</td><td>64</td><td>8.0</td><td>7.0</td></tr> <tr><td>350</td><td>64</td><td>8.5</td><td>7.5</td></tr> <tr><td>400</td><td>50</td><td>9.1</td><td>8.1</td></tr> <tr><td>450</td><td>50</td><td>9.6</td><td>8.6</td></tr> <tr><td>500</td><td>50</td><td>10.2</td><td>9.2</td></tr> <tr><td>600</td><td>50</td><td>11.3</td><td>10.3</td></tr> </tbody> </table> <p>- Add the last para “Ductile iron pipe, fitting and accessories shall possess two-star status under the WSD GA+ scheme.”.</p>	Nominal Size DN (mm)	Pipe Class	Minimum Pipe Thickness (mm)	Minimum Fitting Thickness (mm)	80	100	5.6	4.6	100	100	5.8	4.8	150	100	6.3	5.3	200	64	6.9	5.9	250	64	7.4	6.4	300	64	8.0	7.0	350	64	8.5	7.5	400	50	9.1	8.1	450	50	9.6	8.6	500	50	10.2	9.2	600	50	11.3	10.3
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8.1.1.2	8.1.1.2	Add “Copper pipe, fitting and accessories shall possess two-star status under the WSD GA+ scheme.”.																																																
8.1.1.3	8.1.1.3	In the 2 nd para, add “Ductile iron pipe, fitting and accessories shall possess two-star status under the WSD GA+ scheme.”.																																																
8.1.1.5	8.1.1.5	In the 4 th para, add “PTFE tapes complying with BS 7786 to form a leak-free seal to screw joint shall be provided.”.																																																
8.1.1.8	8.1.1.8	In the last para, add “Neoprene or rubber vibration isolation pad of 8 mm thick shall be added between pipe and bracket for installation inside fire services pump room.”.																																																

Old Ref. No.	New Ref. No.	Major Changes
SUB-SECTION 8.1.2 – HYDRANT AND HOSE REEL SYSTEM		
8.1.2.10	8.1.2.10	Add a new para, “For buildings with designed construction height of 30m or above measured from ground/street level, a closed-circuit type water relaying system and other fire protection measures to facilitate firefighting operation shall be provided for each building block under construction when it reaches the height of 30m above ground/street level. The provisions shall be in accordance with FSD Circular Letter No. 2/2024 & 2/2008 and as approved by the FSD.”.
SUB-SECTION 8.1.3 – AUTOMATIC SPRINKLER SYSTEM		
8.1.3.22.5	8.1.3.22.5	Add “Water pipework shall be suitably sloped and drained to the installation drain in accordance with BS EN 12845 to avoid residual water contained inside the system.”.
SUB-SECTION 8.1.5 – GASEOUS EXTINGUISHING SYSTEM		
8.1.5.1	8.1.5.1	<ul style="list-style-type: none"> - In the 7th para, delete “Heptafluoropropane (HFC-227ea)”. - In the 8th para, delete “and HFC-227ea” and “Trifluoromethane (HFC-23)”.
SUB-SECTION 8.1.6 – MANUAL AND AUTOMATIC FIRE ALARM SYSTEM		
8.1.6.4	8.1.6.4	In the 9 th para, replace “independent organisations accredited under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) by the Hong Kong Accreditation Service (HKAS), or organisations accredited by an accreditation body with mutual recognition agreement with HKAS,” with “Accredited Laboratory”.
8.1.6.9	8.1.6.9	In the 3 rd para, replace “The certification shall cover the entire system and components and shall be approved by an independent organisations accredited under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) by the Hong Kong Accreditation Service (HKAS), or organisations accredited by an accreditation body with mutual recognition agreement with HKAS,” with “The certification shall cover the individual component / device and shall be approved by an Accredited Laboratory,”

Old Ref. No.	New Ref. No.	Major Changes
SUB-SECTION 8.1.9 – ELECTRICAL INSTALLATION		
8.1.9.3	8.1.9.3	In the 3 rd para, replace “IEC 61000-4-11+AMD1: 2017:2004 and IEC 61000-4-34:2005+AMD1:2009” with “IEC 61000-4-11:2004+AMD1: 2017 CSV or IEC 61000-4-34:2005+AMD1:2009”.
8.1.9.10	8.1.9.10	<ul style="list-style-type: none"> - In the 1st para, replace “BS EN60439-1” with “IEC61439-2:2011”. - Add the last para, “The power supply for the motor starter and control and indicating panel should be protected against voltage dip.”.
8.1.9.11	8.1.9.11	<ul style="list-style-type: none"> - Table 8.1.9.11 Installations to use Fire Resistant Cable, sub-item “Fireman’s lift”: - Replace “The power supply cable from main/sub-main switchboards to traction motors/car lighting/power circuit of lift.” with “Cable from the main essential switchboard for fire service installations to the main switch for lift power circuit, car lightings, etc, in the lift machine room.”. - Add “(c) Cables running inside concealed PVC conduits with concrete, cement or plaster cover of total thickness not less than 30 mm in which at least 12mm concrete depth;”. - In the last para, replace “(a), (b), (c), (d) and (e)” with “(a) to (f)”.
SUB-SECTION 8.1.10 – POTABLE HAND-OPERATED APPROVED APPLIANCES		
8.1.10.3	8.1.10.3	In the 1 st para, replace “Novac 1230, FM200” with “FK-5-1-12”.
8.1.10.4	8.1.10.4	In the 2 nd paragraph, replace “(Novac 1230) or HFC-227ea (FM200 / FE-227)” with “FK-5-1-12”.
SUB-SECTION 9.2.2 – TERRESTRIAL MASTER ANTENNA TELEVISION SYSTEM		
9.2.2.7	9.2.2.7	<ul style="list-style-type: none"> - Add “IEC 60332-1-2:2004+AMD1:2015”. - Replace “IEC 61196-5:1982” with “IEC 61196-5:2007”. - Replace “IEC 61196-5:1982” with “IEC 61196-5:2007”.

Old Ref. No.	New Ref. No.	Major Changes
SUB-SECTION 9.3.1 – SPECIFIC REQUIREMENTS DURING CONSTRUCTION PERIOD		
9.3.1.2	9.3.1.2	Replace “organisations accredited by the Hong Kong Laboratory Accreditation Scheme (HOKLAS) or by the Hong Kong Accreditation Service (HKAS), or organisations accredited by an accreditation scheme mutually recognised by HOKLAS or HKAS.” with “an Accredited Laboratory”.
SUB-SECTION 11.1.1 - GENERAL REQUIREMENTS		
11.1.1.1	11.1.1.1	<ul style="list-style-type: none"> - Replace "PVC-insulated, and sheathed, flexible cables with 4 to 72 cores" with "PVC-insulated, and sheathed, flexible cables with 3 to 72 cores". - Delete "Cables with 12 or more cores shall be used, and all cables that are to be grouped together shall be of the same size unless otherwise approved by the Supervising Officer."
11.1.1.3	11.1.1.3	<ul style="list-style-type: none"> - Replace "..... emergency load" with "..... emergency alarm and intercom". - Replace "EN 60335-2-29:2004+A2:2010" with "BS EN IEC 60335-2-29:2021+A1:2021".
11.1.1.6	11.1.1.6	Replace "The acceptable maximum jerk is 4 m/s ² " with "The acceptable maximum jerk is 2 m/s ³ ".
SUB-SECTION 11.1.2 - ELECTRIC AND HYDRAULIC LIFT		
11.1.2.4.1	11.1.2.4.1	<ul style="list-style-type: none"> - Add "..... or ISO 4344:2004 EDTN2.....". - Replace "..... Relevant test certificates or test reports issued by organisations accredited by the Hong Kong Laboratory Accreditation Scheme (HOKLAS) or by the Hong Kong Accreditation Service (HKAS), or organisations accredited by an accreditation scheme mutually recognised by HOKLAS or HKAS shall be submitted for approval. The test certificates or test reports specially referred to the ropes delivered to the Site shall be provided with an undertaking submitted." with "..... Relevant valid test certificates or test reports issued by an Accredited Laboratory shall be submitted for approval.".
11.1.2.4.6	-	Delete the original clause.
11.1.2.6	11.1.2.6	Delete "extending from a position 0.30 m above the lift pit floor to a position at least 2.50 m above the lift pit floor".

Old Ref. No.	New Ref. No.	Major Changes
11.1.2.8.2	11.1.2.8.2	Add "for new installation projects. For lift renewal projects, the interior clear height of the car shall not be less than existing height".
11.1.2.8.5	11.1.2.8.5	Add "Grade 316".
11.1.2.8.5	11.1.2.8.5	In sub-para (a), add " or rubber".
11.1.2.9.3	11.1.2.9.3	In sub-para (b), Add "This switch can be non-key operated if it is inside a key locked attendant control panel."
11.1.2.9.4	11.1.2.9.4	Replace "..... position indicator" with "..... car position indication".
11.1.2.9.7	11.1.2.9.7	<ul style="list-style-type: none"> - In the 1st para, replace "..... with colour Liquid Crystal Display (LCD) monitor(s) or similar slim type monitor(s) approved by the Supervising Officer or as instructed by the Supervising Officer." with " shall comprise colour Liquid Crystal Display (LCD) monitor(s) or similar slim type monitor(s) and speakers and approved by the Supervising Officer." - In the 2nd para, replace "..... the floor position, and position indicator(s)" by "..... the car position, and car position indicator(s)".
11.1.2.10.5	11.1.2.10.5	Add "Grade 316 ".
11.1.2.11.5	11.1.2.11.5	Replace "when position indicator is not provided." with "when car position indicator at landing is not provided."
11.1.2.17.1	11.1.2.17.1	<ul style="list-style-type: none"> - Replace “General Specification for Electrical Installation in Government Buildings” with “General Specification for Building Services Installation in Government Buildings”. - Add "(except Machine-room-less lift)".
11.1.2.18.7	11.1.2.18.7	<ul style="list-style-type: none"> - In sub-para (g), replace “attendant control" with "independent control”. - In sub-para (g), add "or a bi-stable switch". - In sub-para (g), add "for Destination Control System, the already assigned destined floor call(s) of the lift(s) shall be cancelled whilst".
11.1.2.18.8	11.1.2.18.8	Add “The hall destination/registered floor indicator for each lift shall be provided and installed at all floors.".

Old Ref. No.	New Ref. No.	Major Changes
11.1.2.19.5	11.1.2.19.5	Add "This requirement does not apply to lift renewal project, unless otherwise specified in Particular Specification and/or drawings."
11.1.2.20.5	11.1.2.20.5	<ul style="list-style-type: none"> - Delete sub-para (d). - Replace sub-para (e) to (d). - Replace sub-para (f) to (e). - Replace sub-para (g) to (f). - Replace sub-para (h) to (g).
11.1.2.22.8	11.1.2.22.8	Add "or mirror finished stainless steel surface ".
SUB-SECTION 11.1.3 - ESCALATOR AND PASSENGER CONVEYOR INSTALLATION		
11.1.3.1.1	11.1.3.1.1	In the 3 rd para, add " not less than".
11.1.3.12	11.1.3.12	<ul style="list-style-type: none"> - Add "(comb light)". - Add "near comb".
11.1.3.14.1	11.1.3.14.1	<ul style="list-style-type: none"> - In sub-para (k), replace “Overspeed governor" with "Detection of Excessive Speed”. - In sub-para (k), Replace “overspeed governor" with "excessive speed detection device”.
11.1.3.15.1	11.1.3.15.1	Replace “two key operated direction switches " with "key operated direction switch”.
11.1.3.17.7	11.1.3.17.7	Add “Pictographs shall be used as defined below.”.
11.1.3.19.2	11.1.3.19.2	In sub-para (b), add “grade 316”.
SUB-SECTION 11.1.4 - POWERED VERTICAL LIFTING PLATFORM INSTALLATION		
11.1.4.6.3	11.1.4.6.3	<ul style="list-style-type: none"> - In sub-para (a), replace “24V DC" with "Maximum 24V DC voltage"”. - In sub-para (c), delete "of the 'push-to-stop', 'pull to run' type”.

Old Ref. No.	New Ref. No.	Major Changes
SUB-SECTION 11.1.5 - STAIRLIFT INSTALLATION		
11.1.5.1.2	11.1.5.1.2	<ul style="list-style-type: none"> - Replace “EN 81-40:2008 ” with "EN 81-40:2020”. - Replace “ASME A17.1:2019 "with "ASME A17.1:2022”.
11.1.5.1.10	11.1.5.1.10	Replace “IEC 60034-1:2017 ” by "IEC 60034-1:2022”.
SUB-SECTION 11.2.2 - SPECIFIC REQUIREMENTS DURING MAINTENANCE PERIOD		
11.2.2.2	11.2.2.2	Replace “performance, and documentation, and tracking of investigations" with "performance and documentation, investigations”.
11.2.2.3	11.2.2.3	Add “, the following additional works”.
11.2.2.4	11.2.2.4	Add “and Circular No. 13/2022 issued by the Electrical and Mechanical Services Department, the Government of the HKSAR for the Roll-out of Digital Log-books for Lifts/ Escalators .”.
SUB-SECTION 13.1.1 – PLUMBING SYSTEMS		
13.1.1.4.5	13.1.1.4.5	<ul style="list-style-type: none"> - In the 1st para, add “aboveground” before ‘ductile iron pipe’. - .In the 1st para, add “Underground ductile iron pipes shall be jointed with socket joints or socketed fittings. The type of pipe joints shall be approved under WSD GA Scheme and lubricant shall be used on the gaskets inside socket joints.”. - Add a new para, “For connection WSD flanged type water meters from DN50 to DN300, blue epoxy-coated slip on type flange adaptors with EPDM gaskets to BS 6920 Series, i.e. BS 6920-1:2014, BS 6920-2.1:2014, BS 6920-2.2.1:2000+A3:2014, BS 6920-2.2.2:2000+A1:2014, BS 6920-2.2.3:2000+A2:2014, BS 6920-2.3:2000+A1:2014, BS 6920-2.4:2000+A1:2014, BS 6920-2.5:2000+A2:2014, BS 6920-2.6:2000+A2:2014 and BS 6920-3:2000, shall be adopted. The internal stud bolts and nuts shall be Grade A4 stainless steel to BS EN ISO 3506-1 and BS EN ISO 3506-2 respectively, the nut’s surface coated with an anti-galling coating.”.
13.1.1.5.2	13.1.1.5.2	- Replace the Copper pipes, Nominal Size (mm) from “76 and 108” with “76 to 133” and add Copper pipes, Nominal Size (mm) “159” with Maximum Spacing (mm) Vertical pipes “3600” and Horizontal pipes “3600” in the Table 13.1.1.5.2 Spacing of Pipe Fixing.

Old Ref. No.	New Ref. No.	Major Changes
13.1.1.8.3	13.1.1.8.3	Add the following new paras: - “For fresh water concrete and rainwater harvesting water concrete tanks, be fitted with stainless steel double sealed access covers and frames, the grading of stainless steel shall be BS EN 10088-3 Grade 1.4301 and with minimum thickness of 3 mm”; - “For flush water concrete tanks, be fitted with stainless steel access covers and frames, the grading of stainless steel shall be to BS EN 10088-3 Grade 1.4401 and with minimum thickness of 3 mm”; - “For fibre glass water tanks, be fitted with fibre glass access covers, the thickness of fibre glass shall be the same as fibre glass water tanks.”
13.1.1.11.4	13.1.1.11.4	- Replace “accredited laboratories under the HOKLAS or by the Hong Kong Accreditation Service (HKAS), or organisations accredited by an accreditation scheme mutually recognised by HOKLAS or HKAS” with “an Accredited Laboratory”.
13.1.1.12.3	13.1.1.12.3	- Replace “accredited by HOKLAS or by HKAS, or organisations accredited by an accreditation scheme mutually recognised by HOKLAS or HKAS” with “Accredited Laboratory”.
SECTION 13.2.1 – PLUMBING SYSTEMS		
13.2.1.1.3	13.2.1.1.3	- Replace “organisations accredited by HOKLAS or by HKAS, or organisations accredited by an accreditation scheme mutually recognised by HOKLAS or HKAS” with “Accredited Laboratory not more than 3 years.”.
13.2.1.1.4	13.2.1.1.4	- Replace “BS 6920-1:2014” with “BS 6920 Series”.
13.2.1.1.9	-	- Delete original clause.
13.2.1.1.10	-	- Delete original clause.
13.2.1.1.11	-	- Delete original clause.

Old Ref. No.	New Ref. No.	Major Changes
13.2.1.2.1	13.2.1.2.1	<ul style="list-style-type: none"> - In the 1st para of sub-para (a), amend as “Ductile iron pipe, fitting and accessories shall be to BS EN 545:2010, and shall possess two-star status under the WSD GA+ scheme, with minimum thickness in full compliance with the following Table 13.2.1.2.4 with internal sulphate-resisting cement mortar lining and external coating.”. - In the 2nd para of sub-para (a), amend as “Copper pipe to BS EN 1057:2006+A1:2010, copper pipe fitting to BS EN 1254-1, 2, 4, 5, 6:1998, BS EN 1254-7:2021 or BS 8537:2010, shall possess two-star status under the WSD GA+ scheme; or”. - In the 3rd para, add “and shall possess two-star status under the WSD GA+ scheme.”.
13.2.1.2.1	13.2.1.2.1	<ul style="list-style-type: none"> - In the 1st para of sub-para (b) & (d), amend as “Copper pipe to BS EN 1057:2006+A1:2010, copper pipe fitting to BS EN 1254-1, 2, 4, 5, 6:1998, BS EN 1254-7:2021 or BS 8537:2010, shall possess two-star status under the WSD GA+ scheme; or”. - In the 2nd para of sub-para (b) & (d), add “and shall possess two-star status under the WSD GA+ scheme.”.
13.2.1.2.1	13.2.1.2.1	<ul style="list-style-type: none"> - In the 1st para of sub-para (e), amend as “Ductile iron pipe, fitting and accessories shall be to BS EN 545:2010, and shall possess two-star status under the WSD GA+ scheme, with minimum thickness in full compliance with the following Table 13.2.1.2.4 with internal sulphate-resisting cement mortar lining and external bitumen coating; or”. - In the 2nd para of sub-para (e), delete “BS 4346-1:1969 or”.
13.2.1.2.2	13.2.1.2.2	<ul style="list-style-type: none"> - Add the 1st para, “Copper pipe, joints and fittings shall possess two-star status under the WSD GA+ scheme.”. - In the 3rd para, amend as “...shall comply with BS EN 1254-1, 2, 4, 5, 6:1998, BS EN 1254-7:2021 or BS 8537:2010.”.
13.2.1.2.3	13.2.1.2.3	<ul style="list-style-type: none"> - Add the 1st para, “Stainless steel pipe, joints and fittings shall possess two-star status under the WSD GA+ scheme.”.

Old Ref. No.	New Ref. No.	Major Changes																																																
13.2.1.2.4	13.2.1.2.4	<ul style="list-style-type: none"> - Add “and shall possess two-star status under the WSD GA+ scheme”. - Replace “with internal cement lining and external bitumen coating” with “with internal sulphate-resisting cement mortar lining and external coating”. - Update the table 13.2.1.2.4 as <table border="1" data-bbox="752 360 1592 938" style="margin-left: 20px;"> <thead> <tr> <th data-bbox="752 360 943 512">Nominal Size DN (mm)</th> <th data-bbox="943 360 1162 512">Pipe Class</th> <th data-bbox="1162 360 1368 512">Minimum Pipe Thickness (mm)</th> <th data-bbox="1368 360 1592 512">Minimum Fitting Thickness (mm)</th> </tr> </thead> <tbody> <tr><td>80</td><td>100</td><td>5.6</td><td>4.7</td></tr> <tr><td>100</td><td>100</td><td>5.8</td><td>4.8</td></tr> <tr><td>150</td><td>100</td><td>6.4</td><td>5.4</td></tr> <tr><td>200</td><td>64</td><td>6.9</td><td>5.9</td></tr> <tr><td>250</td><td>64</td><td>7.5</td><td>6.5</td></tr> <tr><td>300</td><td>64</td><td>8.0</td><td>7.0</td></tr> <tr><td>350</td><td>64</td><td>8.6</td><td>7.6</td></tr> <tr><td>400</td><td>50</td><td>9.1</td><td>8.1</td></tr> <tr><td>450</td><td>50</td><td>9.7</td><td>8.7</td></tr> <tr><td>500</td><td>50</td><td>10.2</td><td>9.2</td></tr> <tr><td>600</td><td>50</td><td>11.3</td><td>10.3</td></tr> </tbody> </table> 	Nominal Size DN (mm)	Pipe Class	Minimum Pipe Thickness (mm)	Minimum Fitting Thickness (mm)	80	100	5.6	4.7	100	100	5.8	4.8	150	100	6.4	5.4	200	64	6.9	5.9	250	64	7.5	6.5	300	64	8.0	7.0	350	64	8.6	7.6	400	50	9.1	8.1	450	50	9.7	8.7	500	50	10.2	9.2	600	50	11.3	10.3
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500	50	10.2	9.2																																															
600	50	11.3	10.3																																															
13.2.1.2.4	13.2.1.2.4	<ul style="list-style-type: none"> - Replace “metallic zinc and bitumen finishing externally and lined with cement mortar internally” with “metallic zinc covered by bitumen finishing or blue synthetic resin externally and lined with sulphate resisting cement mortar internally”. - Replace “metallic zinc and bitumen or epoxy finishing externally and lined with cement mortar or epoxy internally” with “zinc-rich paint covered by bitumen or epoxy finishing externally and lined sulphate-resisting with cement mortar or blue epoxy internally”. - Add “The flanges shall comply with BS EN 1092-2:1997 PN 16 or PN 25.”. - Add “Gaskets shall be made of Ethylene Propylene Diene Monomer (EPDM) if used for potable water, it shall comply with BS 6920 Series.”. - Add “Gaskets shall comply with BS EN 681-1.”. 																																																

Old Ref. No.	New Ref. No.	Major Changes
13.2.1.2.5	13.2.1.2.5	<ul style="list-style-type: none"> - Delete “BS 4346 Part1:1969”. - Item (a) - replace “BS 4346 Part1:1969” with “BS EN ISO 1452-3:2010”. - Item (b) - replace “BS 4346 Part 2:1970” with “BS EN ISO 1452-1,2,4,5:2009 and 1452-3:2010”. - Item (c) - replace “BS 4346: Part 3:1982” with “BS EN ISO 1452-1,2,4,5:2009 and 1452-3:2010”.
13.2.1.6.1	13.2.1.6.1	<ul style="list-style-type: none"> - Replace “organisations accredited by HOKLAS or by HKAS, or organisations accredited by an accreditation scheme mutually recognised by HOKLAS or HKAS” with “an Accredited Laboratory not more than 3 years.”. - Replace “BS 6920-1:2014” with “BS 6920 Series”.
13.2.1.6.2	13.2.1.6.2	Replace “BS 6920-1:2014” with “BS 6920 Series”.
13.2.1.6.3	13.2.1.6.3	Add “uPVC ball valves comply with BS1452-4:2009.”.
13.2.1.7.1	13.2.1.7.1	<ul style="list-style-type: none"> - Replace “organisations accredited by HOKLAS or by HKAS, or organisations accredited by an accreditation scheme mutually recognised by HOKLAS or HKAS’ with ‘an Accredited Laboratory not more than 3 years.” - Replace “BS 6920-1:2014” with “BS 6920 Series”.
13.2.1.7.2	13.2.1.7.2	Replace “organisations accredited by HOKLAS or by HKAS, or organisations accredited by an accreditation scheme mutually recognised by HOKLAS or HKAS” with “an Accredited Laboratory not more than 3 years.”.
SECTION 13.2.2 – WATER HANDLING EQUIPMENT		
13.2.2.3.2	13.2.2.3.2	Replace “Casing: Cast iron/Stainless Steel” with “Casing: Stainless steel”.
13.2.2.3.3	13.2.2.3.3	<ul style="list-style-type: none"> - In sub-para (a), Delete “cast iron to BS EN 1561:2011 or ISO 185:2005”. - In sub-para (b), delete “or stainless steel to AISI 316”. - In sub-para (b), Delete “Austenitic cast iron to BS EN 13835:2012 Number 5.1500; or ISO 2892: 2007 Ed2 (R10)

Old Ref. No.	New Ref. No.	Major Changes
SECTION 13.2.3 – DRINKING FOUNTAIN AND WATER DISPENSER		
13.2.3.1.2	13.2.3.1.2	Replace “BS 6920-1:2014” with “BS 6920 Series”.
13.2.3.1.5	13.2.3.1.5	Replace “BS 6920-1:2014” with “BS 6920 Series”.
13.2.3.3.3	13.2.3.3.3	Replace “organisations accredited by HOKLAS or by HKAS, or organisations accredited by an accreditation scheme mutually recognised by HOKLAS or HKAS” with “an Accredited Laboratory”.
SUB-SECTION 14.2.2 - UNDERGROUND DRAINAGE SYSTEM		
14.2.2.1.3	14.2.2.1.3	Delete “Cast iron pipes and fittings for use in pressurised drainage system with pipe size larger than 150 mm diameter shall be to BS 598:2007+A1:2009 with flexible joints of spigot and socket type.”.
14.2.2.1.5	14.2.2.1.5	<ul style="list-style-type: none"> - Replace “BS EN 1401-1:2019” with “BS EN 1401-1:2019+A1:2023”. - Delete “BS 4346-1:1969”. - Replace “BS EN ISO 1452-4:2009 or BS EN 1452-5:2009” to “BS EN ISO 1452-4:2009, and BS EN 1452-5:2009”.
14.2.2.2.3	14.2.2.2.3	Replace “BS EN 1561:2011 Grade EN-GJL-220” with “BS EN 1561:2011 Grade EN-GJL-250”.
14.2.2.2.4	14.2.2.2.4	Replace “BS EN 1561:2011 Grade EN-GJL-220” with “BS EN 1561:2011 Grade EN-GJL-250”.
14.2.2.2.5	14.2.2.2.5	Replace “BS EN 1561:2011 Grade EN-GJL-220” with “BS EN 1561:2011 Grade EN-GJL-250”.
14.2.2.3.6	14.2.2.3.6	Delete “or 2 layers of black non-toxic coal-tar based coating to BS 4164:2002”.
14.2.2.3.7	14.2.2.3.7	Delete “or 2 layers of black non-toxic coal-tar based coating to BS 4164:2002”.
SUB-SECTION 15.1.1 - WATER CIRCULATION		
15.1.1.2.1	15.1.1.2.1	Add “Motors shall meet the requirements of IEC 60072-1:1991, IEC 60072-2:1990 and IEC 60072-3:1994 whichever is appropriate.”.
15.1.1.9.2	15.1.1.9.2	Replace “B1.9.1” with “15.1.1.9.1”.

Old Ref. No.	New Ref. No.	Major Changes
15.1.1.10.3	15.1.1.10.3	In sub-para (a), replace “independent regulatory/testing bodies, organisations accredited by the Hong Kong Laboratory Accreditation Scheme (HOKLAS) or by the Hong Kong Accreditation Service (HKAS), or organisations accredited by an accreditation scheme mutually recognised by HOKLAS or HKAS” with “an Accredited Laboratory”.
15.1.1.10.5	15.1.1.10.5	Add “bore”.
15.1.1.10.10	15.1.1.10.10	Add “bore”.
SUB-SECTION 15.1.6 - ULTRA-VIOLET DISINFECTION SYSTEM		
15.1.6.4	15.1.6.4	Delete “Warranty for”.
SUB-SECTION 15.1.7 - CONTROL SYSTEM		
15.1.7.1.1	15.1.7.1.1	In the 3rd para, delete “the Appendix to”.
15.1.7.2.1	15.1.7.2.1	Delete “Basically”.
15.1.7.2.2	15.1.7.2.2	Delete “Basically”.
15.1.7.2.4	15.1.7.2.4	- In the 1 st para, replace “LCD screen” with “flat screen monitor”. - In the 2 nd para, replace “8.2.5.4” with “6.2.5.4”.
SUB-SECTION 15.2.1 - SPECIFIC REQUIREMENTS DURING CONSTRUCTION PERIOD		
15.2.1.3.1	15.2.1.3.1	Delete sub-para (b)(ii).
SUB-SECTION 16.1.2 – STEAM BOILERS		
16.1.2.1.16	16.1.2.1.16	In the 6 th paragraph, add “unless otherwise specified in the Particular Specification:-”.
SUB-SECTION 16.1.4 – CRANE AND HOISTS INSTALLATION		
16.1.4.1.1	16.1.4.1.1	In sub-para (i) and (vi), replace “IEC 60034-1:2010” with “IEC 60034-1:2017”.

Old Ref. No.	New Ref. No.	Major Changes
16.1.4.1.1	16.1.4.1.1	In sub-para (i) and (vii), replace “IEC 60034-1:2010” with “IEC 60034-1:2017”.
16.1.4.1.1	16.1.4.1.1	In sub-para (i) and (viii), replace “IEC 60034-1:2010” with “IEC 60034-1:2017”.
16.1.4.1.1	16.1.4.1.1	In sub-para (i) and (xiii), replace “IEC 60947-2:2013” with “IEC 60947-2:2016/AMD1:2019”.
SUB-SECTION 16.1.5 – FUEL SUPPLY SYSTEM		
16.1.5.1.2	16.1.5.1.2	Replace “BS EN 12285-1: 2003” with “BS EN 12285-1:2018”. Replace “ISO 2560:2009” with “ISO 2560:2020”.
16.1.5.2.7	16.1.5.2.7	Replace “ISO 65:1981” with “BS EN 10255:2004”.
16.1.5.3.1	16.1.5.3.1	In sub-para (b), replace “organisations accredited by the Hong Kong Laboratory Accreditation Scheme (HOKLAS) or by the Hong Kong Accreditation Service (HKAS), or organisations accredited by an accreditation scheme mutually recognised by HOKLAS or HKAS” with “an Accredited Laboratory”.
16.1.5.3.1	16.1.5.3.1	In sub-para (d), replace “ISO 12944:1998+Part5:2007” with “ISO 12944-5:2019”.
SUB-SECTION 16.1.6 – GARAGE EQUIPMENT		
16.1.6.1.9	16.1.6.1.9	In sub-para (c), replace “IEC 60034-5:2006” with “IEC 60034-5:2000+AMD1:2006”.
SUB-SECTION 16.1.8 – HOT WATER SYSTEM		
16.1.8.1.2	16.1.8.1.2	In the 1 st paragraph, add “or the other sections for specific hot water system.”.
16.1.8.1.3	16.1.8.1.3	In the 1 st paragraph, add “or the other sections for specific hot water system.”.
16.1.8.1.8	16.1.8.1.8	In the 6 th paragraph, add “unless otherwise specified in the Particular Specification:-”.
16.1.8.2.2	16.1.8.2.2	In sub-para (b), replace “BS EN 1171:2002” with “BS EN 1171:2015”.

Old Ref. No.	New Ref. No.	Major Changes
SUB-SECTION 16.1.10 – SEWAGE PUMP SYSTEM INSTALLATION		
16.1.10.2.1	16.1.10.2.1	Replace “BS EN 10088-1:2015” with “BS EN 10088-1:2014”.
16.1.10.2.5	16.1.10.2.5	- Replace “BS EN 598:2007” with “BS EN 598:2007+A1:2009”. - Replace “BS EN 10088-1:2015” with “BS EN 10088-1:2014”.
16.1.10.2.6	16.1.10.2.6	Replace “BS EN 1171:2002” with “BS EN 1171:2015”.
SUB-SECTION 16.1.11 – PNEUMATIC TUBE TRANSPORTATION SYSTEM		
16.1.11.1.13	16.1.11.1.13	Replace “IEC 60034-1:2010” with “IEC 60034-1:2017”.
SUB-SECTION 16.1.12 – VEHICLE TURNTABLE		
16.1.12.1.6	16.1.12.1.6	In sub-para (a), replace “IEC 60947-4-1:2012” with “IEC 60947-4-1:2018”.
SUB-SECTION 16.1.13 – FOOD WASTE COMPOSTING SYSTEM		
16.1.13.1.1	16.1.13.1.1	In the 8 th paragraph, replace “organisations accredited by the Hong Kong Laboratory Accreditation Scheme (HOKLAS) or by the Hong Kong Accreditation Service (HKAS), or organisations accredited by an accreditation scheme mutually recognised by HOKLAS or HKAS” with “an Accredited Laboratory”.
SUB-SECTION 17.1.2 – BULK LPG STORAGE VESSELS		
17.1.2.5	17.1.2.5	Replace “BS EN 12266-1:2012 and BS EN 12266-2:2012 or ANSI/ API Std 607:2016 or equivalent,…” with “BS EN 10497 or ANSI/API Std 607 or equivalent, …”.
17.1.2.6	17.1.2.6	Replace “Section 3.1.5 of with Code of Practice for Hong Kong LPG Industry Module 1” with “Section 4.1.5 of with Code of Practice for Hong Kong LPG Industry Module 1”.
17.1.2.7	17.1.2.7	Replace “Section 4.7 of Code of Practice for Hong Kong LPG Industry Module 1” with “Section 5.7 of Code of Practice for Hong Kong LPG Industry Module 1”.

Old Ref. No.	New Ref. No.	Major Changes
SUB-SECTION 17.1.5 – PIPING AND FITTINGS		
17.1.5.5	17.1.5.5	Replace “BS EN 10253-1:1999” with “BS EN 10253-2”.
SUB-SECTION 17.1.11 – LPG APPLIANCES		
17.1.11.2	17.1.11.2	In the 1 st para, replace “GU16” with “GU15”.
SUB-SECTION 18.1.1 - WATER CIRCULATION		
18.1.1.2.1	18.1.1.2.1	Add “Motors shall meet the requirements of IEC 60072-1:1991, IEC 60072-2:1990 and IEC 60072-3:1994 whichever is appropriate.”.
18.1.1.10.3	18.1.1.10.3	In sub-para (a), replace “independent regulatory/testing bodies, organisations accredited by the Hong Kong Laboratory Accreditation Scheme (HOKLAS) or by the Hong Kong Accreditation Service (HKAS), or organisations accredited by an accreditation scheme mutually recognised by HOKLAS or HKAS” with “an Accredited Laboratory”.
SUB-SECTION 18.1.6 - ULTRA-VIOLET DISINFECTION SYSTEM		
18.1.6.1	18.1.6.1	Add: “UV warning label and all necessary safety measures to prevent direct exposure to UV light rays during operation, inspection and maintenance shall be provided. The warning sign shall state:”
		<p style="text-align: center;">WARNING</p> <p style="text-align: center;">DO NOT EXPOSE EYES AND SKIN TO ULTRA-VIOLET LIGHT RAYS ARE HARMFUL TO UNPROTECTED EYES AND SKIN</p> <p style="text-align: center;">警告</p> <p style="text-align: center;">切勿讓眼睛及皮膚暴露於紫外光之下, 可引致損害</p>
18.1.6.4	18.1.6.4	Delete “Warranty for”.

Old Ref. No.	New Ref. No.	Major Changes
SUB-SECTION 18.1.7 - CONTROL SYSTEM		
18.1.7.2.1	18.1.7.2.1	Delete “Basically”.
18.1.7.2.2	18.1.7.2.2	Delete “Basically”.
18.1.7.2.4	18.1.7.2.4	<ul style="list-style-type: none"> - In the 1st para, replace “LCD screen” by “flat screen monitor”. - In the 2nd para, replace “8.2.5.4” by “6.2.5.4”.
SUB-SECTION 18.2.1 - SPECIFIC REQUIREMENTS DURING CONSTRUCTION PERIOD		
18.2.1.3.1	18.2.1.3.1	Delete sub-para (b)(ii).